51 – 041 – 00078

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

29 JUL 2004

Tyrone Chichester
Safety Health and Environmental Resources
E.I. Du Pont de Nemours and Company, Inc.
Route 130
Deepwater, NJ 08023

Re: Notice and Finding of Violation
Docket No. CAA-04-7

Dear Mr. Chichester:

On March 11, 2003, duly authorized representatives of the U.S. Environmental Protection Agency, Region III and Region V ("EPA"), and the Virginia Department of Environmental Quality ("VADEQ") conducted an inspection at the Dupont James River Plant, located at 1201 Bellwood Road, Richmond, Virginia 23237-1333 (hereinafter, the "Facility"). The purpose of the inspection was to assess the Facility's compliance with the Clean Air Act (CAA). Based on the findings of the March 11, 2003, Facility inspection and a review of other pertinent information, EPA hereby informs E.I. Du Pont de Nemours and Company, Inc. ("Dupont") by the attached Notice and Finding of Violation ("NOV/FOV") that you are operating your Facility and have been operating your Facility in violation in violation of Section 111 of the CAA (related to Standards of Performance for New Stationary Sources ("NSPS") and the regulations promulgated thereunder at 40 C.F.R. § 60.80, Subpart H - Standards of Performance for Sulfuric Acid Plants); Part C of Title I of the Act related to the preconstruction requirement of New Source Review ("NSR") and the regulations promulgated thereunder at 40 C.F.R. §52.21 concerning the prevention of significant deterioration ("PSD") of air quality; and the federally- enforceable Virginia State Implementation Plan ("SIP").

Pursuant to the Clean Air Act, the Facility has an opportunity to confer with EPA to discuss the enclosed NOV/FOV. Please consider this an opportunity for the Facility to discuss with EPA a resolution of the violations identified in the attached NOV/FOV.

If you would like to arrange a meeting with EPA representatives to discuss the contents of the enclosed NOV/FOV, please contact either Dennis Abraham, Senior Assistant Regional Counsel at 215-814-5214 or Thomas Gleave of the Air Protection Division at 215-814-2155 at your earliest convenience but no later than thirty days after your receipt of this letter.

Sincerely,

Judith M. Katz, Director
Air Protection Division

Enclosure (1)

cc: James Golden, Deputy Regional Director, VADEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, PA 19103

In the Matter of:	:	
	:	**NOTICE AND FINDING**
E.I. Du Pont de Nemours and Company, Inc.:		**OF**
and Dupont James River Plant	:	**VIOLATION**
1201 Bellwood Road,	:	
Richmond, VA 23237	:	**Docket No. CAA-04-7**

I. STATUTORY AUTHORITY

This Notice of Violation ("NOV") and Finding of Violation ("FOV") (collectively, the "NOV/FOV") is issued pursuant to Sections 113(a)(1) and (a)(3) of the Clean Air Act ("CAA" or the "Act"), as amended on November 15, 1990 by P.L. 101-549,42 U.S.C. §§ 7413(a)(1) and (a)(3). Section 113(a)(1) of the Act requires the Administrator of the United States Environmental Protection Agency ("EPA" or the "Agency") to notify a person in violation of any requirement or prohibition of an applicable implementation plan or permit, and the State in which the plan applies of such violation. Section 113(a)(3) of the Act provides that "whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter . . . the Administrator may [among other things]. . . issue an administrative penalty order. . .issue an order requiring such person to comply with such requirement or prohibition [or] bring a civil action. . ."

EPA hereby issues this NOV/FOV to E.I. Du Pont de Nemours and Company, Inc., "Permittee" under a Virginia Stationary Source Title V Operating Permit (No. VA-50554), and one of its affiliated businesses or branches trading as the "DuPont James River Plant" (hereinafter collectively, "Dupont" or "Respondent"), for violations of: Section 111 of the CAA (related to Standards of Performance for New Stationary Sources ("NSPS") and the regulations promulgated thereunder at 40 C.F.R. § 60.80, Subpart H - Standards of Performance for Sulfuric Acid Plants); Part C of Title I of the Act related to the preconstruction requirement of New Source Review ("NSR") and the regulations promulgated thereunder at 40 C.F.R. §52.21 concerning the prevention of significant deterioration ("PSD") of air quality; and the federally-enforceable Virginia State Implementation Plan ("SIP"), at the Dupont James River Plant, located at 1201 Bellwood Road, Richmond, Virginia 23237-1333 (hereinafter, the "Facility").

The authority to issue this NOV/FOV has been delegated to the Director of EPA Region III's Air Protection Division.

II. APPLICABLE STATUTES AND REGULATIONS

A. Standards of Performance for Sulfuric Acid Plants

1. Section 111(e) of the Act, 42 U.S.C. § 7411(e), provides that after the effective date of a standard of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of that standard of performance applicable to such source.

2. Section 111(a)(2) of the Act, 42 U.S.C. § 7411(a)(2), defines the term "new source" as any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance applicable to such source.

3. Construction or modification is "commenced" when an owner or operator of a stationary source "has undertaken a continuous program of construction or modification, or has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification." 40 C.F.R. § 60.2.

4. Section 111(a)(4) of the Act, 42 U.S.C. § 7411(a)(4), defines "modification," in pertinent part, as "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source ." This definition requires that the physical or operational change result in an increase in emission of any pollutant for which a standard applies. 40 C.F.R. §60.14(a). A net emissions increase is calculated by comparing the hourly emission rate, at maximum physical capacity, before and after the physical or operational change.

5. A modified stationary source must comply with all applicable standards within 180 days from the completion of any physical or operational change. 40 C.F.R. § 60.14(g).

6. 40 C.F.R. §60.7 requires, in pertinent part, that any owner or operator subject to the provisions of Part 60 provide written notification of the date of construction, the date of start up, and the date of any physical or operational change to a NSPS affected facility.

7. EPA proposed the NSPS for sulfuric acid plants on August 17, 1971. 36 Fed. Reg. 15704. U.S. EPA promulgated the NSPS for sulfuric acid plants, Subpart H, on December 23, 1971. 36 Fed. Reg. 24877.

8. 40 C.F.R. § 60.81 defines a sulfuric acid production unit to mean any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid (a.k.a. spent sulfuric acid), hydrogen sulfide, organic sulfides and mercaptans, and acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions of sulfur dioxide or other sulfur compounds.

9. The Sulfuric Acid Plant NSPS, Subpart H, at 40 C.F.R. § 60.82, provides that the owner or operator of any sulfuric acid production unit shall not cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of 2 kilograms per metric ton of acid produced (kg/ton) (4 pounds per ton of acid produced (lbs/ton)), production being expressed as 100 percent H_2SO_4 (sulfuric acid).

10. The Sulfuric Acid Plant NSPS, Subpart H, at 40 C.F.R. § 60.83(a)(1), provides that the owner or operator of any sulfuric acid production unit shall not cause to be discharged into the atmosphere from any affected facility any gases which contain acid mist expressed as sulfuric acid (sulfuric acid) in excess of 00.075 kilograms per metric ton of acid produced (kg/ton) (0.15 pounds per ton of acid produced (lbs/ton)), production being expressed as 100 percent sulfuric acid.

B. Prevention of Significant Deterioration

11. On August 7, 1980, EPA promulgated the federal PSD air quality standards, pursuant to Subtitle I, Part C of the Act. These regulations are codified at 40 C.F.R. § 52.21, and were revised on December 31, 2002 (67 Fed. Reg. 80187), effective March 3, 2003. For the violations set forth in this NOV/FOV which occurred between the period 1982 through 1998, the federal PSD regulations in effect at that time have primacy. For the violations which occurred after 1998, the Commonwealth of Virginia's federally-approved PSD program, as codified in the Commonwealth's SIP at 40 C.F.R. § 52.2420(c), has primacy.

12. Section 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a), requires states to adopt a state implementation plan ("SIP") that contains emissions limitations and such other measures as may be necessary to prevent significant deterioration of air quality in areas designated as attainment or unclassifiable.

13. A state may comply with Sections 110(a) and 161 of the Act by having its own PSD regulations approved as part of its SIP by EPA, which must be at least as stringent as those set forth at 40 C.F.R. § 51.166. If a state does not have a PSD program that has been approved by EPA and incorporated into the SIP, the federal PSD regulations set forth at 40 C.F.R. § 52.21 shall be incorporated by reference into the SIP.

14. On August 7, 1980, EPA disapproved Virginia's proposed PSD program. 45 Fed. Reg. 52676, 52741 (August 7, 1980). Accordingly, EPA promulgated the PSD regulations of 40 C.F.R. §§ 52.21(b) through (w) into the Virginia SIP at 40 C.F.R. § 52.2451(b), and delegated to Virginia the authority to implement the federal PSD program incorporated into the SIP. See, 9 VAC 5 Chapter 80, Part II, Article 8.

15. On March 23, 1998, EPA approved Virginia's proposed PSD program and granted Virginia authority effective April 22, 1998, to issue PSD permits under its SIP-approved program at 40 C.F.R. § 52.2420(c). 63 Fed. Reg. 13795, 13797 (March 23, 1998). At the same time, the authority to implement 40 C.F.R. § 52.21 as a delegated agency pursuant to 40 C.F.R. §52.2452(b) was recinded.

16. Part C of Title I of the Act and the PSD regulations implementing Part C, at 40 C.F.R. § § 52.21, prohibit a major stationary source from constructing a modification without first obtaining a PSD permit, if the modification is major in that it will result in a significant net increase in emissions of a regulated pollutant, and if the source is located in an area which has achieved the National Ambient Air Quality Standards (NAAQS) for that pollutant. A PSD area is one formally designated, pursuant to section 107(d) of the Act and 40 C.F.R. 81 by a State, as "attainment" or "unclassified" for any criteria pollutant, i.e., an air pollutant for which a NAAQS exists.

17. The Facility is located within an air quality control region that is classified as "attainment" with the NAAQS for sulfur dioxide (SO_2). As of September 12, 1978 (43 Fed. Reg. 40502), Richmond Virginia has been designated "attainment" for SO_2, and has remained so for all times relevant to the period covered by this NOV/FOV.

18. 40 C.F.R. § 52.21(b)(1)(i)(a) defines a "major stationary source" as any stationary source within one of 28 source categories which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act. Sulfuric acid plants are included among the 28 source categories.

19. 40 CFR § 52.21(b)(2)(i) defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

20. 40 C.F.R. § 52.21(b)(3)(i) defines "net emissions increase" as "the amount by which the sum of the following exceeds zero:

> (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
>
> (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."

21. 40 C.F.R. § 52.21(b)(23)(i) provides that "significant" means, in reference to a net emissions increase, or the potential of a source to emit a pollutant such as **sulfur dioxide** (SO_2), a rate of emissions that would equal or exceed 40 tons per year of SO_2.

22. 40 C.F.R. § 52.21(b)(23)(i) provides that "significant" means, in reference to a net emissions increase, or the potential of a source to emit a pollutant such as **sulfuric acid mist**, a rate of emissions that would equal or exceed 7 tons per year of sulfuric acid mist.

23. 40 C.F.R. § 52.21(b)(21)(ii) provides that actual emissions, as of a particular date, shall equal the average rate in tons per year at which the unit actually emitted the pollutant, during a two-year period which precedes the particular date and which is representative of normal source operation.

24. 40 C.F.R. § 52.21(b)(21)(iv) provides that, for any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit that particular date.

25. 40 C.F.R. § 52.21(b)(4) provides that, "potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design.

26. 40 C.F.R. § 52.21(i) provides that, no major stationary source or major modification shall begin construction without a permit that states that the major stationary source or major modification would meet the requirements of 40 C.F.R. § 52.21(j through r).

27. 40 C.F.R. § 52.21(j) provides that, for each pollutant subject to regulation under the Act for which a major modification would result in a significant net emissions increase at the source, the owner or operator of the major modification shall apply best available control technology ("BACT") to each proposed emissions unit at which the increase would occur as the result of physical changes and changes in the methods of operation of the unit.

28. 40 C.F.R. § 52.21(k) provides that, the owner or operator of a major modification shall show that the significant net emissions increase will not contribute to a violation of any NAAQS, and that the increase will not be in excess of any applicable maximum allowable increase over the baseline ambient air concentration.

29. 40 C.F.R. § 52.21(m) provides that, the owner or operator of a major modification shall conduct and submit as part of a permit application, an ambient air quality analysis for each air pollutant subject to regulation under the Act for which the major modification would result in a significant net emissions increase at the source.

30. 40 C.F.R. § 52.21(n) provides that, the owner or operator of a major modification shall submit all information necessary to perform an analysis or make any determination required under 40 C.F.R. § 52.21.

31. The provisions of 9 VAC 50-80-1700C of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution, apply in prevention of significant deterioration areas, to the construction or major modification of any major

stationary source and provide that:

> Where a source is constructed or modified in contemporaneous increments which individually are not subject to approval under this article and which are not part of a program of construction or modification in planned incremental phases approved by the board, all such increments shall be added together for determining the applicability of this article. An incremental change is contemporaneous with the particular change only if it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs.

32. 9 VAC 5-80-1710C defines "actual emissions" as of a particular date as the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The Board shall allow the use of a different time period upon a determination that is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

> a. The board may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
>
> b. For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

33. 9 VAC 5-80-1710C defines "allowable emissions" as the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally and state enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

> a. The applicable standards as set forth in 40 C.F.R. Parts 60 and 61;
>
> b. The applicable implementation plan emissions limitation including those with a future compliance date; or
>
> c. The emissions rate specified as a federally or state enforceable permit condition, including those with a future compliance date.

34. 9 VAC 5-80-1710C defines "best available control technology" as an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each pollutant subject to regulation under the federal Clean Air Act which would be

emitted from any proposed major stationary source or major modification which the board, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 C.F.R Parts 60 and 61. If the board determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

35. 9 VAC 5-80-1710C defines "construction" as any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

36. 9 VAC 5-80-1710C defines "emissions unit" as any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the federal Clean Air Act.

37. 9 VAC 5-80-1710C defines "federally enforceable" as all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 C.F.R Parts 60 and 61, requirements within the implementation plan, and any permit requirements established pursuant to 40 C.F.R § 52.21 or this chapter, including operating permits issued under an EPA-approved program that is incorporated into the implementation plan and expressly requires adherence to any permit issued under such program.

38. 9 VAC 5-80-1710C defines "major modification" as the following:

a. Any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the federal Clean Air Act.

b. Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.

c. A physical change or change in the method of operation shall not include:

(1) Routine maintenance, repair and replacement;

(2) Use of an alternative fuel or raw material by a stationary source which:

(a) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally and state enforceable permit condition which was established after January 6, 1975 pursuant to 40 C.F.R § 52.21 or this chapter; or

(b) The source is approved to use under any permit issued under 40 C.F.R § 52.21 or this chapter;

(3) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally and state enforceable permit condition which was established after January 6, 1975 pursuant to 40 C.F.R § 52.21 or this chapter.

39. 9 VAC 5-80-1710C defines "necessary preconstruction approvals or permits" as those permits or approvals required under federal air quality control laws and regulations, and those air quality control laws and regulations which are part of the applicable implementation plan.

40. 9 VAC 5-80-1710C defines "net emissions increase" as the amount by which the sum of the following exceeds zero:

(1) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(2) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

b. An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:

(1) The date five years before construction on the particular change commences; and

(2) The date that the increase from the particular change occurs.

c. An increase or decrease in actual emissions is creditable only if the board has not relied on it in issuing a permit for the source under this article (or the administrator under 40 C.F.R § 52.21), which permit is in effect when the increase in actual emissions from the particular change occurs.

d. An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

e. An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

f. A decrease in actual emissions is creditable only to the extent that:

(1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(2) It is federally and state enforceable at and after the time that actual construction on the particular change begins; and

(3) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

g. An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

41. 9 VAC 5-80-1710C defines "potential to emit" as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment, and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally and state enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

42. 9 VAC 5-80-1710C defines "significant" as, in reference to a net emissions increase, or the potential of a source to emit a pollutant such as **sulfur dioxide** (SO_2), a rate of emissions that would equal or exceed 40 tons per year of SO_2

43. 9 VAC 5-80-1720A provides that no owner or other person shall begin actual construction of any major stationary source or major modification without first obtaining from the board a permit to construct and operate such source.

44. 9 VAC 5-80-1750A provides that a single application is required identifying at a minimum each emissions point within the emissions unit subject to this article. The application shall be submitted according to procedures approved by the board. However, where several emissions units are included in one project, a single application covering all units in the project may be submitted. A separate application is required for each location.

45. 9 VAC 5-80-1750B provides that for projects with phased development, a single application may be submitted covering the entire project.

46. 9 VAC 5-80-1750C provides that any application form, report, or compliance certification submitted to the board shall be signed by a responsible official. A responsible official is defined as follows:

1. For a business entity, such as a corporation, association or cooperative, a responsible official is either:

a. The president, secretary, treasurer, or a vice-president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or

b. A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.

c. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.

47. 9 VAC 5-80-1800A provides that a major stationary source or major modification shall meet each applicable emissions limitation under the implementation plan and each applicable emissions standard and standard of performance under 40 C.F.R Parts 60 and 61.

48. 9 VAC 5-80-1800B states that a new major stationary source shall apply best available control technology for each pollutant subject to regulation under the federal Clean Air Act that it would have the potential to emit in significant amounts.

49. 9 VAC 5-80-1800C provides that a major modification shall apply best available control technology for each pollutant subject to regulation under the federal Clean Air Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

III. FINDINGS

50. EPA is authorized by Section 113 of the Act, 42 U.S.C. Section 7413, to take action to ensure that air pollution sources comply with all federally-applicable air pollution control requirements. These include requirements promulgated by EPA and those contained in federally-enforceable SIPs or permits.

51. Dupont owns and/or operates the Facility, which is a sulfuric acid production unit known as the "James River Plant", located at 1201 Bellwood Road, Richmond, Virginia 23237. The sulfuric acid production process produces different grades of sulfuric acid and oleum. "PS3" (100% sulfuric acid) from the James River Plant is piped to the "Du Pont Spruance Plant", in support of Dupont's "Kevlar" manufacturing operations. Weak acid from Dupont's Spruance Plant is returned to the James River Plant, where it is used for the production of gypsum and carbon dioxide.

52. Dupont, a Delaware corporation, is a "person" as that term is defined by Section 302(e) of the Act, 42 U.S.C. §7602(e).

53. The Facility meets the definition of a "sulfuric acid production unit" in 40 C.F.R. § 60.81(a).

54. The Facility meets the definition of "major stationary source" found at 40 C.F.R. § 52.21(b)(1)(i)(a). Prior to 1982 and continuing to the effective date of this NOV/FOV, the Facility has operated as a sulfuric acid plant which emits, or has the potential to emit, 100 tons per year of SO_2 (a regulated NSR pollutant).

55. As of April 22, 1998, the Facility has been subject to the PSD regulations set forth in the Virginia SIP, which includes the requirement to obtain a PSD permit before conducting any major modification to a major stationary source. Prior to that date, the Facility was subject to the August 7, 1980, federal PSD air quality regulations codified at 40 C.F.R. § 52.21 (43 Fed. Reg. 26403).

56. On March 11, 2003, duly authorized EPA inspectors conducted a compliance inspection of the Facility, in accordance with Section 114 of the Act. Information provided by the Respondent at that time, as well as information provided by Respondent in response to EPA's information request letters dated June 5, 2003 and January 27, 2004, formed the basis for EPA's issuance of this NOV/FOV.

The 1982 - 1985 Modifications

57. During the period between 1982 through 1985, Dupont conducted a series of related modifications at the Facility, which included: 1) Expansion of PS-3 Blending Facilities; 2) Replacement of "A" Boiler; 3) Replacement and Expansion of Economizer; 4) Replacement of Dry Tower; 5) Replacement of Dry Tower Cooler; and 6) Converter Modifications. EPA finds that these six (6) modifications should be considered together as a single "major modification" for purposes of PSD applicability, because they were implemented as part of a continuous program of modification at the Facility.

58. As a result of the major modification referenced in paragraph 57 at the Facility, the actual production of 100% sulfuric acid increased by 37,000 tons per year. Using an emissions factor of 27 pounds per ton of 100 % sulfuric acid produced for the "major modification" referenced in paragraph 57 above, Dupont exceeded the 40 ton per year significance level for increased SO_2 emissions, beginning in 1985 until the present.

59. EPA finds that Dupont's exceedance of the 40 ton per year significance level for sulfur dioxide (regulated NSR pollutant), was a violation of the PSD regulations found at 40 C.F.R. § 52.21. EPA further finds that Dupont's implementation of the major modification at the Facility triggered the NSPS "modification" provisions found at 40 C.F.R. §60.14. In 1984, the hourly SO_2 emissions were calculated to be 186 pounds per hour (lbs/hr), and in 1985, the hourly SO_2 emissions were calculated to be 256 lbs/hr. As a result, the Facility is subject to the SO_2 emissions standards of NSPS Subpart H-Standards of Performance for Sulfuric Acid Plants, 40 C.F.R. § 60.82.

The 1993 - 1998 Modifications

60. During the period between 1993 through 1998, Dupont conducted a series of related modifications and component replacements at the Facility, which included:
1) Replacement of the Dry Tower Cooler; 2) Dry Tower Distribution Improvements;
3) Replacement of Sulfur Tank; 4) Economizer Re-Tube and Piping Improvements;

5) Anodic Cooler Water Drain Improvements; 6) Sulfur Burner Gun Upgrade; 7) Replacement of Absorbing Tower; 8) Absorbing Tower Cooler Improvement; and 9) River Pump Upgrade. EPA finds that these nine (9) modifications should be considered together as a single "major modification" for purposes of PSD applicability, because they were implemented as part of a continuous program of modification at the Facility .

61. Using the emissions factors from the Facility's stack tests results and Dupont's annual production data, increased emissions of sulfuric acid mist from the major modification referenced in paragraph 60 exceeded the 7 ton per year PSD significance level, beginning in 1998 until the present.

62. EPA finds that Dupont's increased emissions of sulfuric acid mist (a regulated NSR pollutant) which exceeded the 7 ton per year significance level was a violation of the Virginia SIP-Approved PSD regulations found at 9 VAC 5 Chapter 80, Part II, Article 8. EPA further finds that the major modification undertaken by Dupont resulted in an hourly increase of sulfuric acid mist from 0.35 lbs/hour in 1997 to 2.26 lbs/hour in 1998, triggering the NSPS "modification" provisions found at 40 C.F.R. §60.14. As a result, the Facility is subject to the sulfuric acid mist emissions standards of NSPS Subpart H-Standards of Performance for Sulfuric Acid Plants 40 C.F.R. § 60.83, and the obligation to obtain a permit under the SIP-approved Virginia PSD regulations.

The 2003 Modifications

63. In 2003, Dupont conducted a series of related modifications and component expansion, replacement and improvements at the Facility, which included: 1) Converter Improvements; 2) "B" Boiler Expansion and Improvements; and (3) Installation of the Cold Gas Bypass. These modification projects increased the Facility's annual 100% sulfuric acid production capacity from 91,250 tons to109,500 tons. EPA finds that these three (3) modifications should be considered together as a single "major modification" for purposes of PSD applicability, because they were implemented as part a continuous program of modification at the Facility.

64. In response to EPA's Section 114 information requests, Dupont provided annual emissions data which indicated that the Facility's annual emissions for the years 2001 and 2002, respectively, totaled 911 tons and 1148 tons of SO_2.

65. Using the annual SO_2 emissions data submitted by Dupont for the years 2001 and 2002, and the Potential To Emit (PTE) emissions Dupont submitted to VADEQ for the Facility's 2003 expansion project, Dupont triggered the PSD review provisions. Therefore, EPA finds that Dupont violated 9 VAC 5-80-1720A, which required the Respondent to obtain a permit before beginning actual construction of the 2003 expansion project.

IV. VIOLATIONS

Wherefore, the Administrator of EPA finds that Dupont is in violation of the federally-enforceable Virginia SIP for the 1982 - 1985 Modifications, the 1993 - 1998 Modifications and the 2003 Modifications for the following reasons:

66. Failure to provide written notification to EPA and VADEQ of the date of construction, start-up and date of physical changes to an NSPS affected facility, in connection with the 1982 through 1985 PS-3 Blending Facilities Expansion, "A" Boiler Replacement, Economizer Replacement, Dry Tower Replacement, Dry Tower Cooler Replacement and Converter Modifications at the Facility, all of which resulted in a "major modification" to a stationary source, in violation of 40 C.F.R. § 60.7.

67. Failure to timely install, calibrate and maintain a continuous monitoring system for the measurement of sulfur dioxide at the Facility, in violation of 40 C.F.R . § 60.84.

68. Failure to provide written notification to EPA and VADEQ of the date of construction, start-up and date of physical changes to an NSPS affected facility, in connection with the 1993 through 1998 Dry Tower Cooler Replacement, Dry Tower Distribution Improvements, Sulfur Tank Replacement, Economizer Re-Tube and Piping Improvements, Anodic Cooler Water Drain improvements, Sulfur Burner Gun Upgrade, Absorbing Tower Replacement, Absorbing Tower Cooler Improvement and River Pump Upgrade at the Facility, all of which resulted in a "major modification" to a stationary source, in violation of 40 C.F.R. § 60.7.

69. Failure to provide written notification to EPA and VADEQ of the changes in the method of operations at an NSPS affected facility, which resulted in a "major modification" to a stationary source at the Facility, in violation of 40 C.F.R. § 60.7.

70. Failure to comply with the standards and maintenance requirements provided in 40 C.F.R. § 60.11(d), related to good air pollution control practices for minimizing emissions.

71. For the period 1985 to present, Dupont has continuously emitted into the atmosphere, SO_2 in excess of 2 kilograms per metric ton of 100 percent sulfuric acid produced (kg/ton), or four pounds per ton of 100 percent sulfuric acid produced (4 lbs/ton), in violation of the Sulfuric Acid Plant NSPS, Subpart H, at 40 C.F.R. §60.82.

72. For the period 1993 to present, Dupont has continuously emitted into the atmosphere, sulfuric acid mist in excess of 0.075 kilograms per metric ton of 100 percent sulfuric acid produced (kg/ton), or 0.15 pounds per ton of 100 percent sulfuric acid produced (0.15 lbs/ton), in violation of the Sulfuric Acid Plant NSPS, Subpart H, at 40 C.F.R. §60.83(a)(1).

73. Failure to apply for all "necessary preconstruction approvals or permits", as that term is defined at 40 C.F.R. §52.21(b)(10), prior to the major modifications undertaken by Dupont at the Facility during the periods 1982 through 1985.

74. Failure to undergo PSD review prior to undertaking major modifications at the Facility, during the periods 1982 through 1985.

75. Failure to apply BACT (as that term is defined at 40 C.F.R. §52.21(b)(12) and 9 VAC 5-80-1710C) to the sulfuric acid production unit, prior to the major modifications undertaken by Dupont at the Facility, during the periods 1982 through 1985. These major modifications resulted in an annual increase of SO_2 emissions from the Facility above the significance level. As a result, Dupont is in violation of the Federal PSD rule found at 40 C.F.R. § 52.21.

76. Failure to submit in its application for a permit, all information necessary for the performance of an air quality impact analysis, prior to the major modifications undertaken by Dupont at the Facility, during the periods 1982 through 1985, as required by 40 C.F.R. § 52.21(m) and (n).

77. Failure to apply for all "necessary preconstruction approvals or permits", as that term is defined at 40 C.F.R. §52.21(b)(10), prior to the major modifications undertaken by Dupont at the Facility during the periods 1993 through 1998.

78. Failure to undergo PSD review prior to undertaking major modifications at the Facility, during the periods 1993 through 1998.

79. Failure to apply BACT (as that term is defined at 40 C.F.R. §52.21(b)(12) and 9 VAC 5-80-1710C) to the sulfuric acid production unit, prior to the major modifications undertaken by Dupont at the Facility, from 1993 through 1998. These major modifications resulted in an annual increase of sulfuric acid mist emissions from the Facility above the 7 tpy significance level. As a result, Dupont is in violation of the Virginia SIP Approved PSD regulations found at 9 VAC 5-80-1800.

80. Failure to submit in its application for a permit, all information necessary for the performance of an air quality impact analysis, prior to the major modifications undertaken by Dupont at the Facility, during the periods 1993 through 1998, as required by 9 VAC 5-80-1810, 9 VAC 5-80-1820 and 9 VAC 5-80-1830.

81. Failure to apply for all "necessary preconstruction approvals or permits" as defined in paragraph 39 above, in violation of 9 VAC 5-80-1750 prior to the major modifications undertaken by Dupont at the Facility during the year 2003.

82. Failure to undergo PSD review of major stationary sources and major modifications - source applicability and exemptions in violation of 9 VAC 5-80-1790 prior to undertaking major modifications at the Facility during the year 2003.

83. Failure to apply BACT as defined in paragraph 34 above, to the sulfuric acid production unit prior to the major modifications that were undertaken by Dupont, in connection with the 2003 Converter, "B" Boiler, Cold Gas Bypass Replacements and Dry Tower Cooler Upgrade. These major modifications resulted in an annual increase of SO_2 emissions from the Facility above the significance level. As a result, Dupont is in violation of the Virginia PSD SIP rule, 9 VAC 50-80-1800C.

84. Failure to submit in its application for a permit, all information necessary for the performance of an air quality impact analysis, prior to the major modifications undertaken by Dupont at the Facility, during the year 2003, as required by 9 VAC 5-80-1810, 9 VAC 5-80-1820 and 9 VAC 5-80-1830.

85. Operation of a "new source" in violation of an applicable NSPS after the effective date of such standard, in violation of Section 111(e) of the Act, 42 U.S.C. § 7411(e).

86. Failure to comply with all applicable performance standards within 180 days from completion of physical and/or operational changes to a modified stationary source, in violation of 40 C.F.R. §60.14(g).

87. Dupont will be presumed to remain in violation until it establishes continuous compliance with the above requirements.

ENFORCEMENT

Section 113(a)(1) of the Act, as amended, 42 U.S.C. § 7413(a)(1), provides that at any time after the expiration of 30 days following the date of the issuance of this NOV/FOV, the EPA Administrator, or an EPA official authorized to act as his representative, may, without regard to the period of violation:

> (A) issue an order requiring compliance with the requirements of the state implementation plan or permit, or
>
> (B) issue an administrative penalty order pursuant to Section 113(d) for civil administrative penalties of up to $27,500 per day of violation[1], or

[1] Pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1992, and the Debt Collection Improvement Act of 1998, EPA may assess a civil penalty of up to $27,500 per day

(C) bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties of not more than $27,500 per day for each violation.

Section 113(c) of the Act, as amended, 42 U.S.C. § 7413(c), further provides for criminal penalties or imprisonment, or both, for any person who knowingly violates any plan or permit requirement more than 30 days after the date of the issuance of a NOV/FOV.

Pursuant to Section 306(a) of the Act, as amended, 42 U.S.C. § 7606(a), regulations promulgated thereunder at 40 C.F.R. Part 15, and Executive Order 11738, facilities to be utilized in federal contracts, grants and loans must be in full compliance with the Act and all regulations promulgated pursuant thereto. Violation of the Act may result in the subject facility being declared ineligible for participation in any federal contract, grant, or loan.

PENALTY ASSESSMENT CRITERIA

Section 113(e)(1) of the Act, as amended, 42 U.S.C. § 7413(e)(1), states that the court, in an action for assessment of civil or criminal penalties shall, as appropriate in determining the amount of penalty to be assessed, take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

Section 113(e)(2) of the Act, as amended, 42 U.S.C. § 7413(e)(2), allows the court to assess a penalty for each day of violation. For purposes of determining the number of days of violation, where the plaintiff makes a prima facie showing that the conduct or events giving rise to this violation are likely to have continued or recurred past the date of this NOV/FOV (or a previously issued air pollution control agency NOV for the same violation), the days of violation shall be presumed to include the date of this NOV/FOV (or the previous NOV) and each and every day thereafter until Respondent establishes that continuous compliance has been achieved, except to the extent that Respondent can prove by the preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

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per violation of the Act for violations occurring after January 31, 1997. See Civil Monetary Penalty Inflation Adjustment Rule, 61 Fed. Reg. 69360 (1998) (codified at 40 C.F.R. Parts 19 and 27).

OPPORTUNITY FOR CONFERENCE

Dupont may, upon request, confer with EPA to discuss this NOV/FOV. If DuPont requests a conference with EPA, Dupont should be prepared to describe the causes of the violation and to describe any actions Dupont may have taken or proposes to take to bring the Facility into compliance. Dupont has the right to be represented by counsel.

Dupont must submit any request for a conference with EPA within fourteen (14) calender days of receipt of this NOV/FOV. A request for a conference with EPA, and/or any inquiries regarding this NOV/FOV, should be submitted in writing to:

Dennis M. Abraham
Senior Assistant Regional Counsel
U.S. Environmental Protection Agency, Region III
Office of Regional Counsel (3RC10)
1650 Arch Street
Philadelphia, PA 19103-2029

EFFECTIVE DATE

This NOV/FOV shall be effective immediately upon receipt.

QUESTIONS REGARDING NOV/FOV

If you have any questions regarding the issuance of this NOV/FOV, you may contact Thomas Gleave, Environmental Engineer at (215) 814-2155 or Dennis M. Abraham, Senior Assistant Regional Counsel, at (215) 814-5214.

Judith M. Katz, Director
Air Protection Division

7/28/04
Date